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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PAUL JOSEPH BRADY, GARY F. SAGNELLA,
ELIAS BERELIAN, and LESLEY A. BAKER

Appeal 2009-005315
Application 10/628,211
Technology Center 2100

Decided: April 16, 2010

Before JOSEPH L. DIXON, THU A. DANG, and STEPHEN C. SIU,
Administrative Patent Judges.

SIU, *Administrative Patent Judge.*

DECISION ON APPEAL
STATEMENT OF THE CASE

This is a decision on appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-3, 9, 18, 21-24, 28-39, 42, and 43. Claims 4-8, 10-17, 19, 20, 25-27, 40, and 41 are canceled. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

Invention

The invention is related to facilitating billing within a telecommunications environment (Spec. 1, ¶ [0001]). In particular, the invention relates to efficiently identifying an end user's local service provider (*id.*).

Independent claim 1 is illustrative:

1. A method of identifying a local service provider of a caller in response to a telephone call from the caller to a called party, the method comprising:

receiving a request in a first format from a sender for an identity of the caller's local service provider, the call having been suspended at a switch of an interexchange carrier;

sending a request in a second format to an LNP [local number portability] database, based on a telephone number of the caller, to determine which of a plurality of databases to query, the second format being distinct from the first format;

receiving an identification of a database to query from the LNP database;

determining a message type to send to the identified database to query;

launching a query to the identified database;

receiving an identification of the caller's local service provider from the identified database in response to the query; and

sending a notification to the sender, the notification comprising identifying information of the identified local service provider of the caller

and whether an agreement exists between the identified local service provider and the interexchange carrier,

wherein the interexchange carrier uses the notification to decide whether to connect the suspended call to the called party.

References

The Examiner relies upon the following references as evidence in support of the rejection:

Zebryk	US 4,975,942	Dec. 4, 1990
Akinpelu	US 5,661,792	Aug. 26, 1997
Kung	US 5,987,452	Nov. 16, 1999
Cochrane	US 6,496,828 B1	Dec. 17, 2002
Boughman	US 6,570,973 B1	May 27, 2003

Rejections

Claims 1, 9, 28-36, and 42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Akinpelu and Boughman.

Claim 2 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Akinpelu, Boughman, and Cochrane.

Claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Akinpelu, Boughman, and Kung.

Claims 18, 21, 22, 24, 37-39, and 43 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Akinpelu, Cochrane, and Kung.

Claim 23 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Akinpelu, Cochrane, Kung, and Zebryk.

ISSUES

Issue 1

The Examiner finds that in Akinpelu “the local service provider of a caller is identified by the interexchange carrier in response to a telephone call from the caller to a called party” (Ans. 18).

Appellants submit that Akinpelu “at best identifies the *presumed* local service provider of the caller [and] does not identify the true *identity*, when the caller has a new local service provider” (App. Br. 6).

Issue: Did the Examiner err in finding that Akinpelu would have taught or suggested identifying the true identity of the local service provider of a caller?

Issue 2

The Examiner finds that “Boughman generally notifies the caller if they are about to place a toll/long distance call and gives the user sufficient time to terminate/abort the call before the call is connected” (Ans. 20).

Appellants submit that “[t]here is no basis for believing that one skilled in the art would suspend the call at the interexchange carrier 920 of AKINPELU et al., as asserted by the Examiner, instead of suspending the call at the SCP 24b as taught in BOUGHMAN et al.” (App. Br. 11-12).

Issue: Did the Examiner err in finding that Akinpelu and Boughman would have taught or suggested use of a notification by an interexchange carrier to decide whether to connect a suspended call to a called party?

Issue 3

The Examiner finds that Akinpelu's local universal databases and national universal databases "are databases about phone lines/carriers, LNP etc." (Ans. 22).

Appellants argue that Akinpelu "appears to disclose querying only a single local universal data base 951" (App. Br. 12).

Issue: Did the Examiner err in finding that Akinpelu would have taught or suggested querying a plurality of databases?

Issue 4

The Examiner finds that Cochrane teaches "that a query is selected based on the cost (processing impact) it will have on a database" (Ans. 27).

Appellants submit that "the cost of querying a database is not the same as querying a database for cost information in the database which is related to message type" (App. Br. 16).

Issue: Did the Examiner err in finding that Akinpelu and Cochrane would have taught or suggested determining a message type based upon a cost associated with each of a plurality of available message types?

Issue 5

The Examiner finds that "Kung teaches mapping one query type to at least another format (query translation) based on what query types a database can receive" (Ans. 28).

Appellants argue that Kung "relates to the searching of databases and does not relate to call routing" (App. Br. 17).

Issue: Did the Examiner err in finding that Akinpelu and Kung would have taught or suggested determining a message type based upon the message type supported by an identified database?

Issue 6

The Examiner finds that Zebryk teaches a request received after a telephone call has been disconnected (Ans. 16).

Appellants argue that Zebryk “discloses checking the validity of credit/calling cards and generating billing information” (App. Br. 23).

Issue: Did the Examiner err in finding that Akinpelu and Zebryk would have taught or suggested receipt of a request after a telephone call has been disconnected?

Issue 7

Appellants submit that other limitations, found in claims 24, 28, 34-36, 38, 39, and 42, are not found in the prior art (App. Br. 12, 14, 15, and 20-22).

Issue: Did the Examiner err in finding that the prior art would have taught or suggested other argued limitations?

FINDINGS OF FACT

The following Findings of Fact (FF) are shown by a preponderance of the evidence.

1. Akinpelu teaches a system in which “[t]he interexchange carrier . . . queries the national database to identify the terminating carrier and switch for [a] called number . . . and the interexchange carrier prepares a call detail record including the ANI [automatic number identification], Dialed Number, originating and terminating local carrier identification and switch identification” (col. 4, ll. 51-56).
2. Akinpelu discloses local exchange carriers that each includes a local universal database (col. 3, ll. 5-6) and that are connected to interexchange carriers that have access to a national universal database (col. 3, ll. 24-27).
3. Akinpelu provides an example of a toll call in which a “[d]atabase query is launched to the appropriate NUDB [national universal database] with the DN [dialed number]” (col. 8, ll. 66-67), providing a response that includes location routing number for the dialed number (col. 9, ll. 1-2).
4. Akinpelu teaches that for a local operator assistance call, “[t]he operator system . . . queries the LUDB [local universal database] to get the terminating carrier and terminating switch” (col. 6, ll. 6-8).
5. Boughman discloses an invention that “provides communication subscribers with a notification when placing a toll call” (col. 3,

- II. 29-30). This allows the “the caller [to] terminate the call . . . before the call [is] connected to the called party” (col. 3, II. 36-38).
6. Cochrane teaches a step where “various query plans are costed according to [a] cost model 84” (col. 11, II. 59-60). Then “the query optimized for the least cost is selected” (col. 11, II. 63-64).
7. Kung teaches translation of a source query (col. 6, tab. 1) to translated queries (col. 6, tabs. 2 and 3) for “the secondary databases on which [a] database function is to be performed . . . constructed from a predefined query mapping” (col. 6, II. 46-52).
8. Zebryk teaches “automatically dialing a PC [personal computer] host computer through a local internal modem following one or both of a programmable number of calls or a predetermined time period; upon connection to the host computer, transmitting a batch of . . . transaction records to the host computer; and generating user billing information at said host computer” (col. 3, II. 28-33).

PRINCIPLES OF LAW

Standard of review

The Examiner has the initial burden to set forth the basis for any rejection so as to put the patent applicant on notice of the reasons why the applicant is not entitled to a patent on the claim scope that he seeks – the so-called “*prima facie case*.” *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). An appellant may attempt to overcome an examiner’s rejection on appeal to the Board by submitting arguments and/or evidence to show that

the examiner made an error in either (1) an underlying finding of fact upon which the final conclusion was based, or (2) the reasoning used to reach the legal conclusion. *See Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential). The panel then reviews the rejection for error based upon the issues identified by appellant, and in light of the arguments and evidence produced thereon. *See Oetiker*, 977 F.2d at 1445; *See also Frye*, 94 USPQ2d at 1075.

Claim interpretation

“In the patentability context, claims are to be given their broadest reasonable interpretations. . . . [L]imitations are not to be read into the claims from the specification.” *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993) (citations omitted). A claim meaning is reasonable if one of ordinary skill in the art would understand the claim, read in light of the specification, to encompass the meaning. *See In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

Obviousness

The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, and (3) the level of skill in the art. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986).

“The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results,” *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 416 (2007), especially if the combination would not be “uniquely challenging or difficult for one of ordinary skill in the art,” *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007) (citing *KSR*, 550 U.S. at 418).

ANALYSIS

Issue 1

Based on Appellants’ arguments in the Appeal Brief, we will decide the appeal of claims 1-3, 9, 21, 22, 28-37, 42, and 43 on the basis of claim 1 alone with respect to this issue. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Appellants challenge the Examiner’s finding that Akinpelu would have taught or suggested identifying the true identity of the local service provider of a caller. We find Appellants’ arguments unpersuasive.

Akinpelu teaches querying a national database to identify the terminating carrier for a called number (FF 1). Akinpelu also describes preparation of a call detail record that includes the originating local carrier identification (*id.*). Appellants fail to show how querying to identify a terminating carrier for a called number differs substantively from querying to identify an originating carrier. Changing the object of query would not have been uniquely challenging or difficult to an artisan and would merely have been a predictable application of the teachings and suggestions of Akinpelu. Therefore, we agree with the Examiner that it would have been

obvious to one of ordinary skill in the art to have identified the true identity (querying to identify) of the local service provider (originating local carrier) of a caller based on the disclosure of Akinpelu.

With respect to this issue, Appellants make arguments in support of claims 21, 22, 29, 30, 33, 37, and 43 that are not distinguishable from arguments made in support of claim 1 (App. Br. 12-14 and 19-22). Therefore, these claims fall with claim 1.

For at least these reasons, we find no evidence persuasive of error in the Examiner's 35 U.S.C. § 103(a) rejection of claim 1, and claims 2, 3, 9, 21, 22, 28-37, 42, and 43 which fall therewith, with respect to this issue.

Issue 2

Based on Appellants' arguments in the Appeal Brief, we will decide the appeal of claims 1-3, 9, 28-36, and 42 on the basis of claim 1 alone with respect to this issue. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Appellants challenge the Examiner's use of the combined teachings and suggestions of Akinpelu and Boughman to show use of a notification by an interexchange carrier to decide whether to connect a suspended call to a called party. We find Appellants' arguments unpersuasive.

As discussed, Akinpelu would have taught or suggested identifying the true identity of the local service provider of a caller. Boughman teaches a system that lets a caller know that the caller made a toll call, and allows the caller to terminate the call before the call is connected to the called party (FF 5). Therefore, Akinpelu and Boughman would have taught or suggested

use of a notification (information such as the identity of the local service provider of a caller) to decide (allow for termination by caller) whether to connect a suspended (before the call is connected) call to a called party.

Appellants submit that Boughman “presumably suspends a call while querying a database and allows a wireless caller, not an interexchange carrier, to determine whether the wireless caller wants to complete a toll call to a called number” (App. Br. 9-10). The claim requires that “the interexchange carrier uses [a] notification to decide whether to connect [a] suspended call to the called party” (claim 1), which encompasses any method of using a notification in making the connection decision. In Boughman, the information that a toll call is being made is used by the system to decide whether to connect the call. It is immaterial that this decision is made by giving the caller a chance to terminate the call.

Appellants further submit that an artisan combining Akinpelu and Boughman “would substitute the Access Tandem 32 of BOUGHMAN et al. for the Access Tandem 915 of Fig. 9 of AKINPELU et al.” (App. Br. 10). We find this speculation unconvincing in demonstrating that an artisan would fail to appreciate alternative combinations of the references’ teachings and suggestions because one of ordinary skill in the art would have possessed the creativity and common sense to apply individual teachings and suggestions in more than one manner, particularly when the alternatives yield predictable results.

For at least these reasons, we find no evidence persuasive of error in the Examiner's 35 U.S.C. § 103(a) rejection of claim 1, and claims 2, 3, 9, 28-36, and 42 which fall therewith, with respect to this issue.

Issue 3

Based on Appellants' arguments in the Appeal Brief, we will decide the appeal of claims 9, 31, and 32 on the basis of claim 9 alone with respect to this issue. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Appellants challenge the Examiner's finding that Akinpelu would have taught or suggested several claim limitations, arguing that Akinpelu only discloses querying a single local universal database. We find Appellants' arguments unpersuasive.

Akinpelu discloses querying a plurality of databases including launching queries to local universal databases and/or national universal databases (FF 2-4). We therefore find that Akinpelu would have taught or suggested querying a plurality of databases (e.g., local and national universal databases).

With respect to this issue, Appellants make arguments in support of claims 31 and 32 that are not distinguishable from arguments made in support of claim 9 (App. Br. 13-14). Therefore, these claims stand or fall together with claim 9.

For at least these reasons, we find no evidence persuasive of error in the Examiner's 35 U.S.C. § 103(a) rejection of claim 9, and claims 31 and 32 which fall therewith, with respect to this issue.

Issue 4

Based on Appellants' arguments in the Appeal Brief, we will decide the appeal of claims 2, 18, 21-24, 37-39, and 43 on the basis of claim 2 with respect to this issue. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Appellants challenge the Examiner's finding that Akinpelu and Cochrane would have taught or suggested using associated cost to determine a message type. We find Appellants' arguments unpersuasive.

Cochrane teaches the use of a cost model to select one of a plurality of queries, optimized for the least cost (FF 6). Therefore, Cochrane would have taught or suggested selecting (optimizing) a message (query) type based on cost (using a cost model).

Appellants argue that Cochrane fails to make "a determination of message type based upon monetary cost" (App. Br. 16) and that Cochrane "has nothing to do with cost of a call" (App. Br. 18). However, Appellants' argument is incommensurate with the claim scope since claim 2 fails to recite "monetary cost" or limit cost to the "cost of a call." Cost, as described in Cochrane, falls within a reasonably broad reading of cost as claimed.

For at least these reasons, we find no evidence persuasive of error in the Examiner's 35 U.S.C. § 103(a) rejection of claim 2, and claims 18, 21-24, 37-39, and 43 which fall therewith, with respect to this issue.

Issue 5

Based on Appellants' arguments in the Appeal Brief, we will decide the appeal of claims 3, 18, 21-24, 37-39, and 43 on the basis of claim 3 alone with respect to this issue. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Appellants challenge the Examiner's finding that Akinpelu and Kung would have taught or suggested using the type of message supported by an identified database to determine a message type. We find Appellants' arguments unpersuasive.

Kung teaches translation of a source query to translated queries for a set of secondary databases based on a predefined query mapping (FF 7). Thus, Kung would have taught or suggested determining a message type (translation of query) based upon the message type (using a predefined query mapping) supported by an identified database (secondary database).

For at least these reasons, we find no evidence persuasive of error in the Examiner's 35 U.S.C. § 103(a) rejection of claim 3, and claims 18, 21-24, 37-39, and 43 which fall therewith, with respect to this issue.

Issue 6

Appellants argue that the Examiner's use of Zebryk was erroneous. We find Appellants' arguments unpersuasive.

Zebryk teaches the transmission of information about a phone call following a programmable number of calls (i.e., after at least one phone call has been disconnected) (FF 8). Appellants argue that this is insufficient because Zebryk "does not disclose a request for identifying the true *identity*

of the new or actual local service provider of the caller” (App. Br. 23). We are not persuaded. Zebryk would have taught or suggested transmission of information after a telephone call has been disconnected. As discussed previously, Akinpelu would have taught or suggested Appellants’ claimed request. Therefore, Akinpelu and Zebryk would have taught or suggested receipt of a request (as taught by Akinpelu) after a telephone call has been disconnected (as taught by Zebryk).

For at least these reasons, we find no evidence persuasive of error in the Examiner’s 35 U.S.C. § 103(a) rejection of claim 23 with respect to this issue.

Issue 7

Appellants’ submission regarding claim 24 is exemplary of the remainder of Appellants’ arguments:

It is respectfully submitted that claim 24 is patentable over the combination of AKINPELU et al. in view of COCHRANE et al., further in view of KUNG for all the reasons that claim 18 is patentable. Moreover, claim 24 is further patentable over AKINPELU et al in view of COHRANE et al. further in view of KUNG, which fail to disclose wherein the identified database comprises a line information database. There appears to be no disclosure in AKINPELU et al. of the claimed identified database being a line information database, as alleged in the Official Action.

(App. Br. 20).

Appellants make similar arguments in support of claims 28, 34-36, 38, 39, and 42 (App. Br. 12, 14, 15, 21, and 22). These arguments are

unpersuasive. Mere recitations of claim limitations and conclusory allegations fail to raise issues for review.

Here, the Examiner has made particular findings to support the rejections of claims 24, 28, 34-36, 38, 39, and 42 (Ans. 7, 8, 15, 22-27, and 30; Fin. Rej. 10-12, 18, and 19). Appellants do not offer arguments or evidence to show that these findings are erroneous.

For at least these reasons, we find no evidence persuasive of error in the Examiner's 35 U.S.C. § 103(a) rejection of claims 24, 28, 34-36, 38, 39, and 42 with respect to this issue.

CONCLUSIONS OF LAW

Based on the findings of facts and analysis above, we conclude that Appellants have not demonstrated:

1. that the Examiner erred in finding that Akinpelu would have taught or suggested identifying the true identity of the local service provider of a caller (Issue 1);
2. that the Examiner erred in finding that Akinpelu and Boughman would have taught or suggested use of a notification by an interexchange carrier to decide whether to connect a suspended call to a called party (Issue 2);
3. that the Examiner erred in finding that Akinpelu would have taught or suggested querying a plurality of databases (Issue 3);

4. that the Examiner erred in finding that Akinpelu and Cochrane would have taught or suggested determining a message type based upon a cost associated with each of a plurality of available message types (Issue 4);

5. that the Examiner erred in finding that Akinpelu and Kung would have taught or suggested determining a message type based upon the message type supported by an identified database (Issue 5);

6. that the Examiner erred in finding that Akinpelu and Zebryk would have taught or suggested receipt of a request after a telephone call has been disconnected (Issue 6); and

7. that the Examiner erred in finding that the prior art would have taught or suggested other argued limitations (Issue 7).

DECISION

We affirm the Examiner's decision rejecting claims 1-3, 9, 18, 21-24, 28-39, 42, and 43 under 35 U.S.C. § 103(a).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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